

--	--	--	--	--	--	--	--	--	--

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

BKM2024 – KNOWLEDGE AUDITING AND MAPPING (All Sections/Groups)

3 MARCH 2017
3:00 p.m. – 5:00 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 5 pages with 3 questions only.
2. Attempt **ALL** questions. The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

SECTION A (50 marks)

NewTech is a large smart devices innovation company that is based in the Asia Pacific region. NewTech has approximately 1200 employees for its operations in the region. In terms of its operations, NewTech is organised based on its three main divisions which are finance, marketing and innovation. Its employees are based at its offices in Cyberjaya, Seoul and New Delhi.

The top management has commissioned a knowledge audit in 2015 that was based on interviews and surveys with approximately 400 respondents from all three offices. It was found that the employees who completed the survey were highly experienced with almost 80% of them having over 5 years' experience with NewTech. In addition to that, 128 of them had doctoral degrees. They were generally satisfied with the working environment at NewTech and felt that the employees were working amongst the best brains in the smart devices development field in the region. In order for it to be agile and respond swiftly to changes in the market, NewTech had a very flat organizational structure and emphasized on a matrix structure where employees will work on project teams led by project managers for most part of their work. However, some employees commented on the absence of clear operating procedures and manuals which made their work rather ambiguous and confusing.

The findings of the past knowledge audit indicated the organisation had implemented comprehensive intranet systems that connected employees to data servers and applications that catered to their needs. These systems are well-received by the employees, however, many have lamented on the inability of its IT infrastructure in keeping up with the changes in the way they work these days. One of the project managers for the smart home project explained "my project team has close to 20 members from all over the organisation, and our work require them to travel quite a bit and to work from almost anywhere in the region, the systems that are in place are not cloud-based which makes it difficult for us to get what we need in a timely and seamless manner".

The study also revealed that there are many knowledge experts in the organisation and that they are located at the different divisions and office locations. For example, Ken, Lina, Meg, Neo and Ong are experts in the Innovation division. Ken is located in Cyberjaya, Lina and Meg in Seoul while Neo and Ong are in New Delhi. For the Finance division, Don, Ed and Faye are in New Delhi, Bill and Carl are in Seoul while Ani is in Cyberjaya. On the other hand, for the Marketing division, they have Jill in New Delhi, How and Ina in Seoul and Gan in Cyberjaya.

For each division, the specific knowledge areas tend to be different and the following categories were identified from the study:

- Finance division: procurement; payable; receivable
- Marketing division: branding; promotion
- Innovation division: research; new product development

In the Finance division, there are different types of skills required for each category of knowledge.

Continued ...

For the procurement knowledge category, the two skills are tendering and supplier selection. For tendering, Ani possesses low levels of expertise. Bill and Carl have high levels of expertise in both tendering and supplier selection. Faye also has knowledge in these two areas but at the low level of expertise.

The skills for payable include payment, ledger and reconciliation. Bill has high levels of expertise for payment while Carl has high levels of expertise for all three areas. Faye on the other hand has low levels of expertise in these three areas while Ani has moderate levels of expertise in payment.

For receivables, there are billing, recording and reconciliation. Carl has high levels of expertise in all these areas. On the other hand, Ed has low skills in terms of billing while both Bill and Ani have moderate skills in billing, recording and reconciliation. At the New Delhi office, Don has low level expertise in all these three receivables areas.

QUESTION 1

- (a) (i) Based on the knowledge asset categories explained by Dalkir (2005) and Delgado et al. (2011), list and describe any **TWO (2)** knowledge asset categories that are available in the case study. (4 marks)
- (ii) Suggest ways in which the organisation could develop and improve on the **TWO (2)** knowledge asset categories identified in (a)(i). (6 marks)
- (b) If the organisation wanted to conduct a complete knowledge audit process for the organisation, recommend the various stages or activities that it needs to go through. (12 marks)
- (c) Based on the findings of the study conducted, the organisation would like to map its knowledge and understand where specific knowledge and expertise are located. You are required to:
- (i) develop a **knowledge source map** for the organisation. (4 marks)
- (ii) draw a **knowledge asset map** for the 'Finance' division. (9 marks)
- (iii) develop a **knowledge structure map** for **all** the skill areas in the 'Finance' division. (9 marks)
- (iv) based on the knowledge maps developed in (c) (i), (ii) and (iii), recommend **TWO (2)** appropriate actions that should be taken and your justification for these recommendations. (6 marks)

(Total: 50 marks)

Continued ...

SECTION B (50 marks)**QUESTION 2**

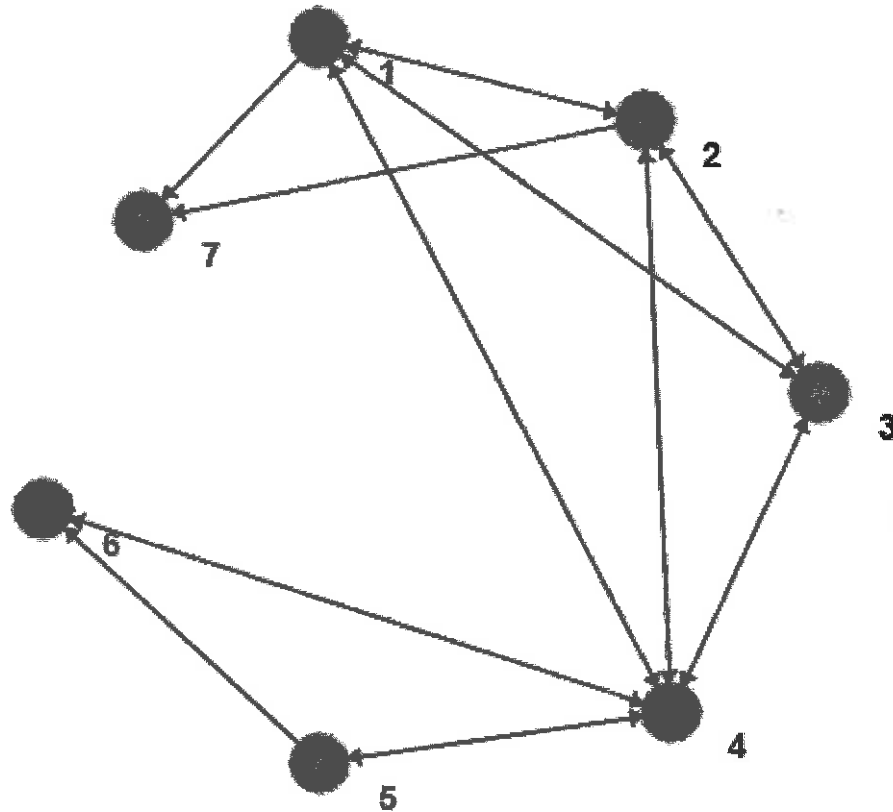
- (a) Your organisation plans to conduct a knowledge audit involving approximately 50 respondents using face-to-face interviews. A team of interviewers will be deployed to collect the data over a period of one month. Briefly explain **THREE (3)** advantages and **THREE (3)** disadvantages of using this method for data collection. (12 marks)
- (b) Delta and Epsilon are public-listed companies with a total market value of RM 600 million and RM 500 million. On the other hand, the assets for both companies are valued at RM 750 million and RM 125 million respectively.
- (i) Calculate the Tobin's Q Ratio for both companies (4 marks)
- (ii) Based on the results obtained in (b)(i), interpret the significance of the Tobin's Q Ratio for both companies (4 marks)
- (c) A mid-sized company plans to introduce cross-functional teams in its organisation to promote knowledge sharing. Advise this company on how they should go about with this plan. (5 marks)

(Total: 25 marks)

Continued ...

QUESTION 3

A social network analysis was conducted for a department in an organisation and the findings were analysed using SocNetV. Based on the adjacency matrix entered, the following sociogram and results were obtained.



Diameter = 3.0

Density = 0.45238

Node	Indegree	Outdegree	Eccentricity	Betweenness	Information Centrality
1	3	4	2	0.066667	0.16377
2	3	4	2	0.066667	0.16377
3	3	3	2	0	0.14883
4	5	5	2	0.5	0.18951
5	1	2	3	0	0.10961
6	2	1	3	0	0.10961
7	2	0	0	0	0.11491

- Comment on the linkages of this social network. (2 marks)
- Which nodes receive and transmit the most within the group? Explain. (4 marks)
- Which node is the most influential in the network? Why? (4 marks)

Continued ...

CLIQUE COUNTS BY VERTEX

Node	2-Vertex	3-Vertex	4-Vertex
1	3	3	1
2	3	3	1
3	3	3	1
4	5	3	1
5	1	0	0
6	1	0	0
7	0	0	0

AGGREGATE COUNTS OF CLIQUES

2-Vertex cliques: 8 (max: 21)

3-Vertex cliques: 4 (max: 35)

4-Vertex cliques: 1 (max: 35)

- (d) (i) What is a clique? Explain. (2 marks)
- (ii) Based on the analysis provided, identify a 3-vertex and a 4-vertex clique that is present in the network. (2 marks)
- (e) Based on your observation of the analysis and sociogram, suggest any **TWO (2)** actions that should be taken by the organisation to improve knowledge sharing within this network. (6 marks)
- (f) It is argued that the social network of an organisation is often not the same with its organizational chart or structure. Do you agree with this view? Justify with **TWO (2)** reasons. (5 marks)

(Total: 25 marks)

End of Paper